Statement of Work EFTS Engineering Services

Introduction

WBS 116 supports NASA in the research, engineering, development, and operation of the Enhanced Flight Termination System (EFTS). Bourne Technologies, Inc. has supported the Department of Defense and NASA on the EFTS program since the year 2000 by providing system's engineering, electrical design and software services as required by supporting the development of the system.

Scope of Work

The purpose of this Statement is to establish a mechanism to obtain engineering, documentation, demonstration, software development, and operations support from Bourne Technologies, Inc. on an as needed basis. The following types of tasks are within scope:

- Develop and specify EFTS product technical requirements, reviewing designs, and documentation.
- Software design and development related to the EFTS System for the EFTS command controller.
- Integrate hardware into equipment racks in a range environment and testing them for demonstrations.
- Interfacing with range representatives and the NSA to determine Security and Operational processes and requirements related to the EFTS.
- Reviewing test documents and witness testing at various government and vendor facilities.
- Develop prototype and debugging hardware and software used in rack mountable equipment for governmental prototypes. Maintain and expansion of existing prototypes to facilitate simulation, testing and demonstrations.
- Design, develop, maintaining and debugging electrical schematics for interconnecting components within a chassis, and for designing printed wiring boards Printed Wiring Boards (PWBs).
- Develop and maintaining software products for the Windows Platform using MS Visual C# and National Instruments Measurement Studio.
- Developing real-time applications on Atmel AT91TDMI family and IAR Systems Embedded Workbench "C" based software.
- Travel for the purpose of training or demonstration
- Travel for the purpose of technical support

Assumptions

 Personnel are offsite. Neither Arcata nor the Government will not need to provide office space and related support

- The Government will not be held liable for cost overruns beyond obligated funding
- Support can be incrementally funded by the Government

Deliverables

- 1. <u>Progress Reports:</u> Written descriptions of activity and accomplishments shall be delivered on a monthly schedule. The format shall be vendor specified.
- 2. EFTS product technical requirements. The format shall be vendor specified.
- 3. <u>EFTS Command Controller Software Design Document.</u> The format shall be vendor specified.
- 4. <u>EFTS Command Controller Source Code.</u> The format shall be vendor specified.
- 5. <u>EFTS Command Controller Software Version Description.</u> This document will be delivered with the EFTS source code and will document the version of the software. The format shall be vendor specified.
- 6. <u>Electrical schematics</u> for interconnecting components within a chassis, and for designing Printed Wiring Boards (PWBs). The format and content of the schematics shall be vendor specified.